A. COVER PAGE

Improving the Quality of Elderly Care in Indiana: Reducing the Incidence of Vaccine-Preventable Pneumonia and Related Morbidity and Mortality

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C. MAIN SECTION OF PROPOSAL

1. Overall Aims & Objectives

In order to reduce the risk of outbreaks, serious illness, hospitalization, and death, as well as reduce direct medical costs of the elderly, the proposed goals of this program are:

1) Improve vaccination rates for pneumococcal disease to 90% in people age 80 and older in the state of Indiana who reside in Continuing Care Retirement Communities (CCRCs), low income senior housing, licensed assisted living facilities(ALFs) and other types of senior housing
2) Improve vaccination rates of healthcare staff in the aforementioned housing/care facilities
3) Extrapolate learnings from the state level activity and disseminate to a wider national audience via publication of toolkit designed to improve the quality of pneumococcal vaccination practices among the elderly

2. Technical Approach

OVERVIEW OF ROLES & RESPONSIBILITIES			
Leading Age Indiana	**ACHL**	**IU**	**Facility Champion**
Planning Phase			
• Review goals and objectives to align with Leading Age strategic efforts • Approve measures that align with Leading Age imperatives • Identify prospective facilities • Facilitate facility recruitment and outreach	• Manage faculty recruitment • Coordinate faculty planning calls • Create facility recruitment materials • Support facility recruitment efforts • Collaborate with biostatistician on data collection practices • Create best practices for facility participation and develop training manual for champions • Oversee development of web-based data collection portal	• Oversee planning and documentation • Oversee faculty selection/ COI resolution management	• Create awareness within facility

OVERVIEW OF ROLES & RESPONSIBILITIES			
Leading Age Indiana	**ACHL**	**IU**	**Facility Champion**
Stage A: Baseline Assessment			
• Review Stage A data	• Conduct training calls with champions • Work with champions on data collection • Perform data mining and analyses of Stage A data • Assist faculty with content development for in-service meetings	• Review and approve Stage A collection data points and processes	• Actively participate in training calls • Complete Stage A data submission
Stage B: Intervention & Action Plan Implementation			
• Review curriculum for in-service meetings	• Schedule in-service meetings • Assist faculty in preparation of educational materials • Work with champions on data collection	• Review and approve all faculty developed content for intervention • Oversee live activity evaluation processes	• Communicate individual needs of facility to faculty • Assist in coordination of live activity • Assist faculty in development of action plans and support materials • Facilitate implementation of recommended changes within facility
Stage C: Reassessment			
• Review Stage C data	• Work with champions on data collection • Perform data mining and analyses of Stage C data	• Review and approve Stage C data collection processes	• Complete Stage C data submission
Outcomes & Publication			
• Promote published organizational framework/ tool box to Leading Age	• Work with biostatistician on data analyses/ outcomes	• Oversee outcomes analyses • Provide final report to grantor	• Disseminate final findings within facility • Oversee ongoing

OVERVIEW OF ROLES & RESPONSIBILITIES			
Leading Age Indiana	**ACHL**	**IU**	**Facility Champion**
Indiana members and other Leading Age chapters nationwide	evaluation • Support faculty with manuscript writing (copyediting, permissions, etc.) • Manage submission of paper with peer-reviewed journal		evaluation of implemented actions for ongoing QI

a. Current Assessment of Need in Target Area

Vaccine-preventable diseases such as pneumonia remain a substantial cause of morbidity and mortality even in the era of routine vaccination. Most notably, within patients ≥ 65 years old, the 2004 total U.S. burden of pneumococcal disease was estimated to have caused 242,000 hospitalizations, 1.4 million hospital days, 194,000 emergency department visits, 374,000 outpatient visits, and 16,000 deaths.(Huang 2011) Furthermore, the annual cost of pneumonia treatment within the Medicare population was estimated at $4.4 billion dollars.(Kaplan 2002) Recent CDC data reveal that at least one third of persons aged 65 years and older have not received a pneumococcal vaccination, indicating a need to continue to improve vaccination coverage in this population.(MMWR 2012)

Incidence of invasive pneumococcal disease varies considerably with age as indicated by ongoing surveillance conducted by the Indiana State Department of Health. Indiana was ranked 25th among the United States for pneumococcal vaccination rates for adults aged 65 years and older (mean of 66.9% based on 2006-2008 BRFSS data); this substantial geographic variation in vaccination rates suggests a state-based need for considerable quality improvement of pneumococcal vaccination within the elderly population.

Further analysis was then conducted to identify which elderly residential settings were in need of the most improvement. According to the latest Centers for Medicare & Medicaid Services (CMS) data, 91% of long-stay nursing home residents in Indiana were assessed and administered pneumococcal vaccination.(medicare.gov 2012; LeadingAge Indiana [personal communication])

The high vaccination rate among these residents is likely due to the CMS mandate on nursing homes to administer routine vaccinations; however, licensed assisted living facilities (ALFs), low income senior housing facilities and Continuing Care Retirement Communities (CCRCs) are not bound by the same CMS requirements.

For the housing and care facilities not bound by CMS vaccination requirements, a furtherneeds assessment was conducted to identify vaccination practice gaps for seniors dwelling, as well as healthcare workers employed in these settings. Recent literature suggests that vaccination

rates suffer due to misperceptions and lack of knowledge on the part of many healthcare providers (Stefanacci & Haimowitz 2012); these gaps are outlined below.

Practice Gap: Healthcare providers are not performing continuous immunization surveillance of pneumococcal vaccination in elderly residents in Indiana, especially within:

- **populations over 80 years of age;**
- **minority communities; and**
- **specific counties**

According to the *2009 Indiana Report of Infectious Diseases*, the incidence rate of pneumococcal infection was highest for adults aged 80 years and older, at 57.2 cases per 100,000, which is significantly higher than the 31 cases targeted by *Healthy People 2020* and the reported national baseline of 40.4 cases.(Figure 1; Table 1) These data suggest a possible age-related gap in vaccination practices among the elderly.

Figure 1. Pneumococcal disease incidence rates in Indiana by age group (2009)

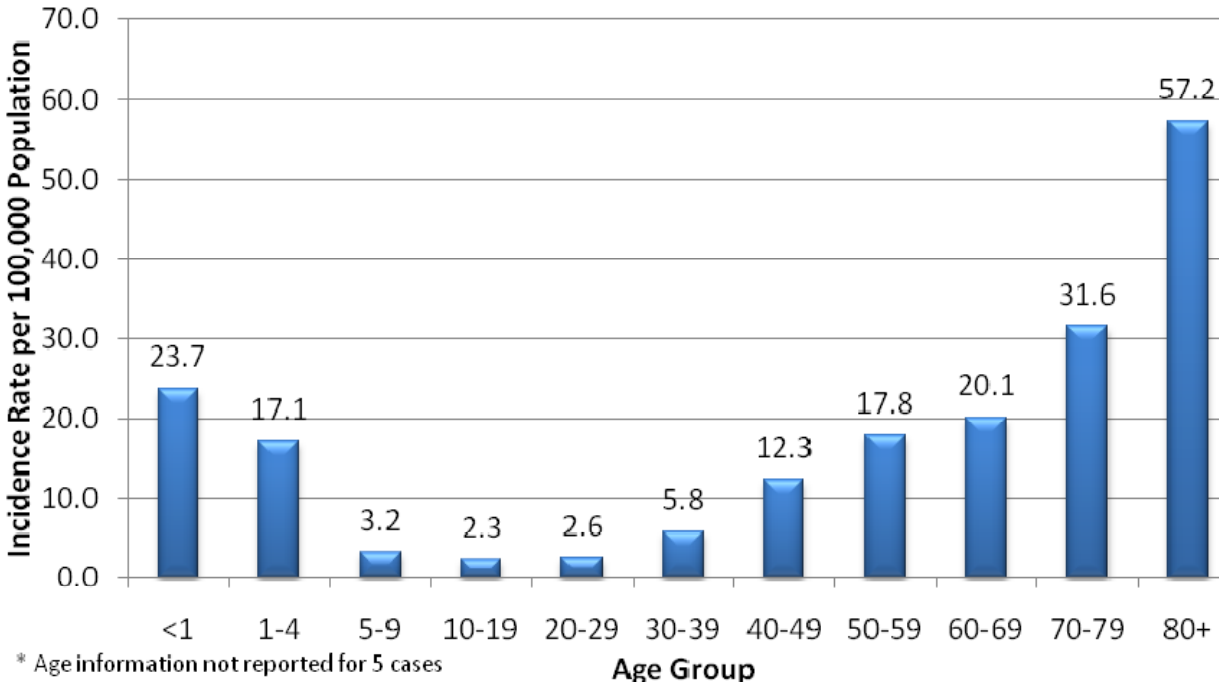


Table 1.New invasive pneumococcal infections among adults aged 65 years and older

	National Statistics (*Healthy People 2020* IID-14.2)	***2009 Indiana Report of Infectious Diseases***		
		60-69	**70-79**	**80+**
Baseline	40.4 new cases per 100,000 adults	20.1 cases	31.6 cases	57.2 cases
Target	31 new cases per 100,000 adults	≤31 cases	≤31 cases	≤31 cases

When considering the overall population (regardless of age), the Indiana State Department of Health reported higher incidence rates of pneumococcal infection among the general black

population (14.5 cases per 100,000) versus the general white population (10.2 cases per 100,000).

Substantial racial/ethnic health disparities exist in the United States. Although the populations of racial and ethnic minorities are growing at a rapid pace, large-scale community-based surveys and surveillance systems designed to monitor the health status of minority populations are limited. In 2009, the CDC reported the median influenza vaccination rates in adults aged ≥65 years were much lower among black (57.3%) and Hispanic communities (63.3%) than the national median (70.1%). Pneumococcal vaccination rates also were lower in black (60.5%), Hispanic (58.5%), and A/PI (59.7%) communities than the national median (68.5%).(Liao 2011)

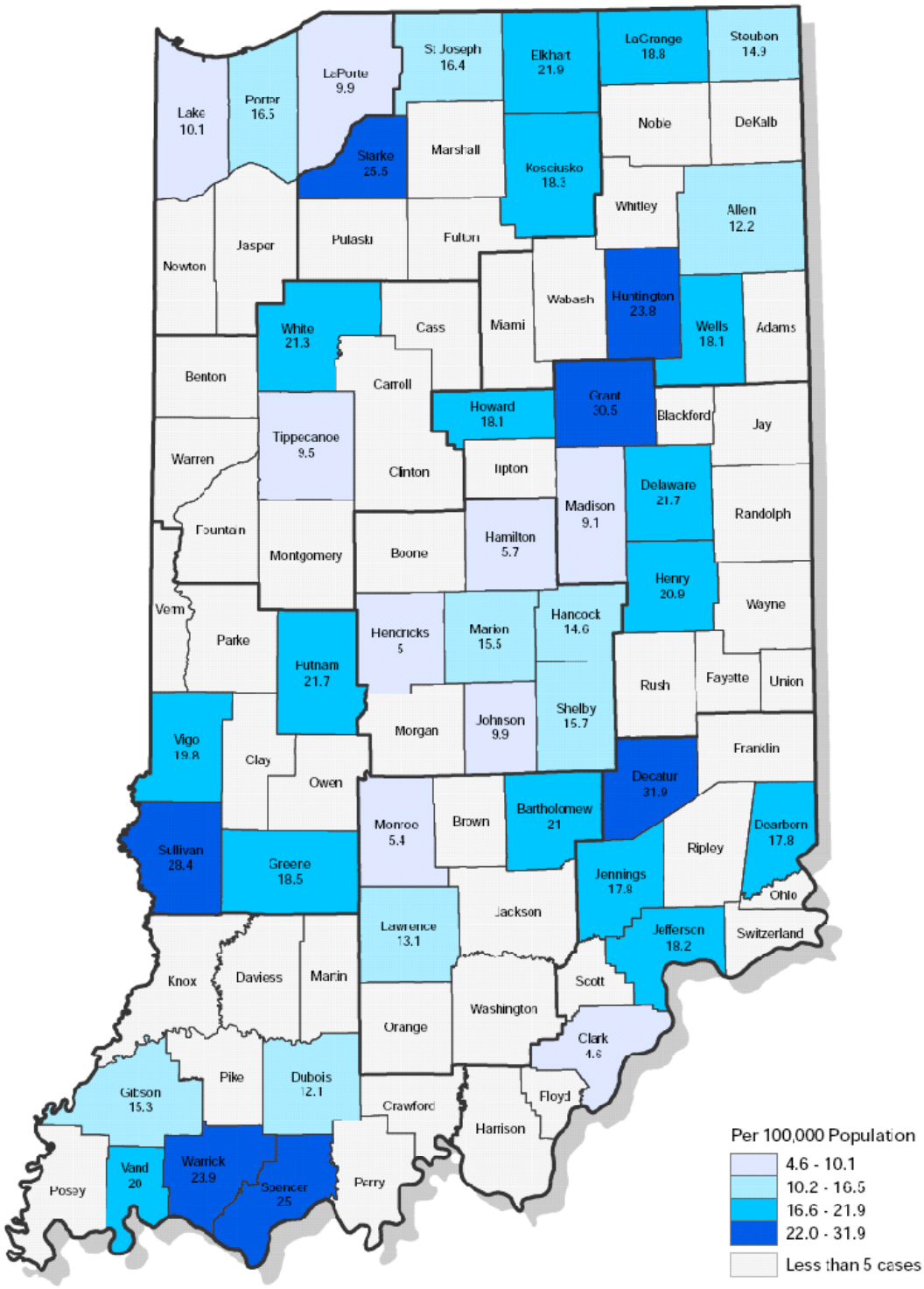
A census-based surveillance study across 9 states (N=4870 adults aged 18 years or older), reported the average annual incidence of bacteremic pneumonia was 24.2 episodes per 100 Black adults versus 10.1 per 100 000 White adults.(Burton 2010) Incidence among Black residents with ≥20% in poverty (most impoverished) was 4.4 times the incidence among White residents with less than 5% of persons in poverty (least impoverished). The authors concluded that adults living in impoverished regions are at increased risk of bacteremic pneumonia and should be targeted for prevention efforts.

These data demonstrate that residents in most of the minority communities continue to have lower socioeconomic status, greater barriers to health-care access, and greater risks for and burden of disease compared with the general populations living in the same county or state. Substantial variations in prevalence of risk factors, chronic conditions, and use of preventive services among different minority populations and different communities within the same racial/ethnic population provide opportunities for public health intervention. These variations also indicate that different priorities are needed to eliminate health disparities for different communities.

A more recent study reported pneumococcal vaccination rates were 22% for blacks and 28% for whites.(Jones 2010) This association remained significant despite adjustment for sociodemographic and clinical confounders, including education, income, chronic obstructive pulmonary disease, and prior pneumonia. Receipt of influenza vaccination was associated with higher odds of receiving pneumococcal vaccination ($P<0.001$), and the association between race and pneumococcal vaccination lost significance when adjusted for influenza vaccination alone ($P=0.09$). The strong association between receipt of influenza and pneumococcal vaccinations suggests that patient and provider attitudes toward vaccination, rather than traditional confounders such as education and income, may help explain the underuse of pneumococcal vaccination in older blacks.

Congruent to the study findings previously noted, significantly higher incidence rates were reported by certain counties in Indiana (Indiana State Department of Health 2011; Figure 2). In 2009, 26 counties reported 5 or more cases of invasive pneumococcal disease; incidence rates were highest among the following counties: Decatur (31.9), Grant (30.5) and Sullivan (28.4).

Figure 2. Pneumococcal Cases by Indiana County (2009)



An interactive effect between rurality and race was previously confirmed from 2005 Behavioral Risk Factor Surveillance System data.(Bennet 2010) The dependent variables were self-reported receipt of annual influenza immunizations in adults aged 50 and older (n=177,417) or lifetime pneumococcal immunizations in adults aged 65 and older (n=81,762). Forty-two percent of

adults aged 50 and older reported an influenza vaccination; 31.1% of rural blacks reported an influenza vaccination, and 64.6% reported a pneumococcal polysaccharide vaccination (PPV). White and black rural residents reported lower vaccination rates. Adjusted analysis indicated an interaction between race and rurality. White rural residents were more likely to be vaccinated than other whites, whereas rural blacks were less likely to be vaccinated than urban blacks. The results indicated the importance of provider availability to delivery. Alternative delivery methods may be an effective solution to improve delivery rates.

Practice Gap: Healthcare providers are unsure of the clinical effectiveness of pneumococcal vaccination in adults.

At this time, two vaccines for prevention of pneumococcal disease are licensed for use in adults. The CDC's Advisory Committee on Immunization Practices (ACIP) currently recommends a single dose of 23-serotype polysaccharide vaccine (PPSV23) for all persons aged 65 years and older.(MMWR 2012). In addition, for adults aged 19 through 64 years, PPSV23 should be administered to those with immunocompromising conditions; those with functional or anatomic asplenia; those who are immunocompetent and have chronic conditions such as alcoholism, diabetes mellitus, or chronic lung disease; those who are smokers; and those with cochlear implants or cerebrospinal fluid leaks.

Routine revaccination with PPSV23 is not recommended, but a second dose is advised no sooner than 5 years after the first dose for adults ages 19 to 64 with functional or anatomic asplenia or immunocompromising conditions. Everyone should receive a PPSV23 dose at age 65 or older, regardless of prior vaccination history.

The 13-valent pneumococcal conjugate vaccine (PCV13) has been approved by the FDA for use in patients ages 50 and older for the prevention of pneumonia and invasive pneumococcal disease. According to the CDC's Advisory Committee on Immunization Practices, which convened on June 19, 2012, adults who have immunocompromising conditions should now receive PCV13 in addition to PPSV23, (MedPage Today).

Approval of PCV13 for adults was based on two randomized, multicenter, immunogenicity studies conducted in the United States and Europe. (MMWR 2012).To date, no controlled trials in have demonstrated a decrease in pneumococcal pneumonia or invasive disease after adult vaccination with PCV13. However, several trials evaluating the effectiveness of PCV13 in adults are ongoing with results expected in late 2012 and 2013.

Practice Gap: Healthcare providers are not aware of specific quality improvement strategies for increasing vaccination rates in assisted living, and other independent living settings for seniors.

Although health care systems and policy changes have been critical in increasing pneumococcal vaccination rates to current levels, numerous barriers to immunization persist. A recent integrative review of the literature demonstrated that immunization rates increased consistently when healthcare systems supported organizational changes in clinical procedures and staffing.(Koch 2011) The availability of information technology to generate reminders and

access clinical guidelines modestly increased vaccination rates while patient reminders (telephone or mail) demonstrated efficacy in multiple studies.

Not surprisingly, the literature also supported the nurse's significant role in enhancing vaccination rates. Continued education for nurses and other allied health professionals can lead to necessary change processes that are needed to improve adult vaccination rates and prevent vaccine-preventable disease.

To eliminate disparities in adult vaccination, evidence-based interventions are needed, including the use of reminder/recall systems, standing orders for vaccination, regular assessments of vaccination coverage levels among provider practices, vaccination registries, improving public and provider awareness of the importance of vaccinations for adults, and public financing of recommended vaccines. (Pickering 2009)

Yancey et al. (2010) found that a comprehensive initiative including a paper vaccine screening form, paper standing order form, and storage of the vaccine on the hospital nursing unit was associated with improvement in pneumococcal vaccination rates in patients with a diagnosis of pneumonia (34.7% to 92.0%). Another vaccination protocol that used electronic technologies including a revised nursing screening tool, a scheduled vaccine order on the second day of the hospital stay, storage of the vaccine in automated dispensing cabinets on the nursing unit, and creation of a vaccine tracking system was associated with significant improvement (74.2% vs. 19.1%, $P < 0.001$) in pneumococcal vaccine administration in eligible medicine patients. (Smith 2011)

These types of multifaceted vaccination protocols may be applied senior care and housing settings to improve pneumococcal vaccine ordering and administration.

Practice Gap: Healthcare providers are not familiar with individual consent requirements for vaccination

Many healthcare providers believe that a signed consent is required for vaccination; however, the fact is that a signed consent is neither legally mandated (with the exception of the State of Maryland) nor a guarantee that the patient has given consent. (Stefanacci&Haimowitz 2012) What is needed, as with all treatments, is that the resident (or their caregivers in the case of cognitively impaired residents) has “informed” consent rather than signed consent.

Practice Gap: Healthcare providers are unfamiliar with coverage and reimbursement for vaccines

Another barrier to effective vaccinations revolves around coverage issues; however, Medicare covers pneumococcal vaccines, as well as influenza, hepatitis B, and tetanus vaccines, separately under Part B. (MMWR 2010)

Practice Gap: Vaccination rates for healthcare personnel are suboptimal.

Immunization for senior care staff is just as important, if not more so, than getting vaccination to the residents, because the staff can easily carry infections into the elderly community. For this reason, the National Foundation for Infectious Diseases (NFID) developed a call to action for improving what they described as a "dismal" influenza vaccination rate among health care workers.(NFID 2011)

The NFID believes that vaccination improvement requires a comprehensive approach and institutional commitment. This view is shared by the CDC, which has long recommended influenzavaccination for all healthcare workers. Despite these efforts, only a small portion of healthcare staff are actually immunized each year.

In accordance with the latest CDC recommendations, healthcare workers ages 50 and over should receive PCV13and those ages 65 and over should also receive PPSV23. The following new recommendations should also be followed for immunocompromised healthcare workers (MedPage Today):

- Adults 19 and older with immunocompromising conditions who have not previously received PCV13 or PPSV23 should receive a single dose of PCV13 followed by a dose of PPSV23 at least 8 weeks later.
- Adults 19 and older with immunocompromising conditions who have previously received at least one dose of PPSV23 should receive a single dose of PCV13 no sooner than 1 year after the last PPSV23 dose. If patients require another PPSV23 dose, it should be administered no sooner than 8 weeks after PCV13 and 5 years after the last PPSV23 dose.

Barriers and Education Needs

The National Foundation for Infectious Diseases (NFID) recently convened a multidisciplinary task force meeting to examine ways to increase pneumococcal vaccination rates for people aged ≥ 65 years. (Rehm 2012) Several barriers to achieving higher vaccination rates were discussed including:

- Lack of awareness of the disease or vaccine among vaccination candidates and healthcare providers
- Failure to assume responsibility for vaccination
- Competing priorities
- Incomplete or inaccessible documentation of previous vaccines
- Health care system delivery challenges

Appropriate methods and strategies to address these barriers are needed to improve the current quality of pneumococcal vaccination among the elderly. Furthermore, all healthcare

providers need to accept responsibility for vaccination so that this preventive measure becomes a high priority in the care of patients at risk for serious pneumococcal infection.

Primary Audiences

The primary audience includes clinicians, administrators and staff working in CCRCs, low income senior housing and/or licensed ALFs. The program will be certified for physicians, nurses, pharmacists and case managers. Findings and recommendations from this activity will be disseminated by Leading Age to its constituents and partner organizations, as well as via a published manuscript in a peer-reviewed journal.

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b. Intervention Design and Methods

In order to achieve the aforementioned goals, Leading Age Indiana will identify/recruit 25 CCRCs, low income senior housing, and/or licensed ALFs within the state with diverse educational needs, such as:

- Predominately African American patient residents/minority community
- Rural areas
- Indiana counties reporting highest incidence rates of pneumococcal cases

Leading Age Indiana will not include nursing homes, as CMS mandates vaccination practices in these types of facilities and as such, vaccination rates should be at 100%.

These recruited facilities will participate in the quality improvement program as follows:

Stage A: Data Collection and Assessment

20 facilities will comprise a test group and 5 will serve as a control group. All participating facilities (in both the test and control groups) will be required to submit patient/resident data (aligned to identified quality measures) to an online portal. This data will be used to establish a baseline against which the effectiveness of the educational interventions is measured.

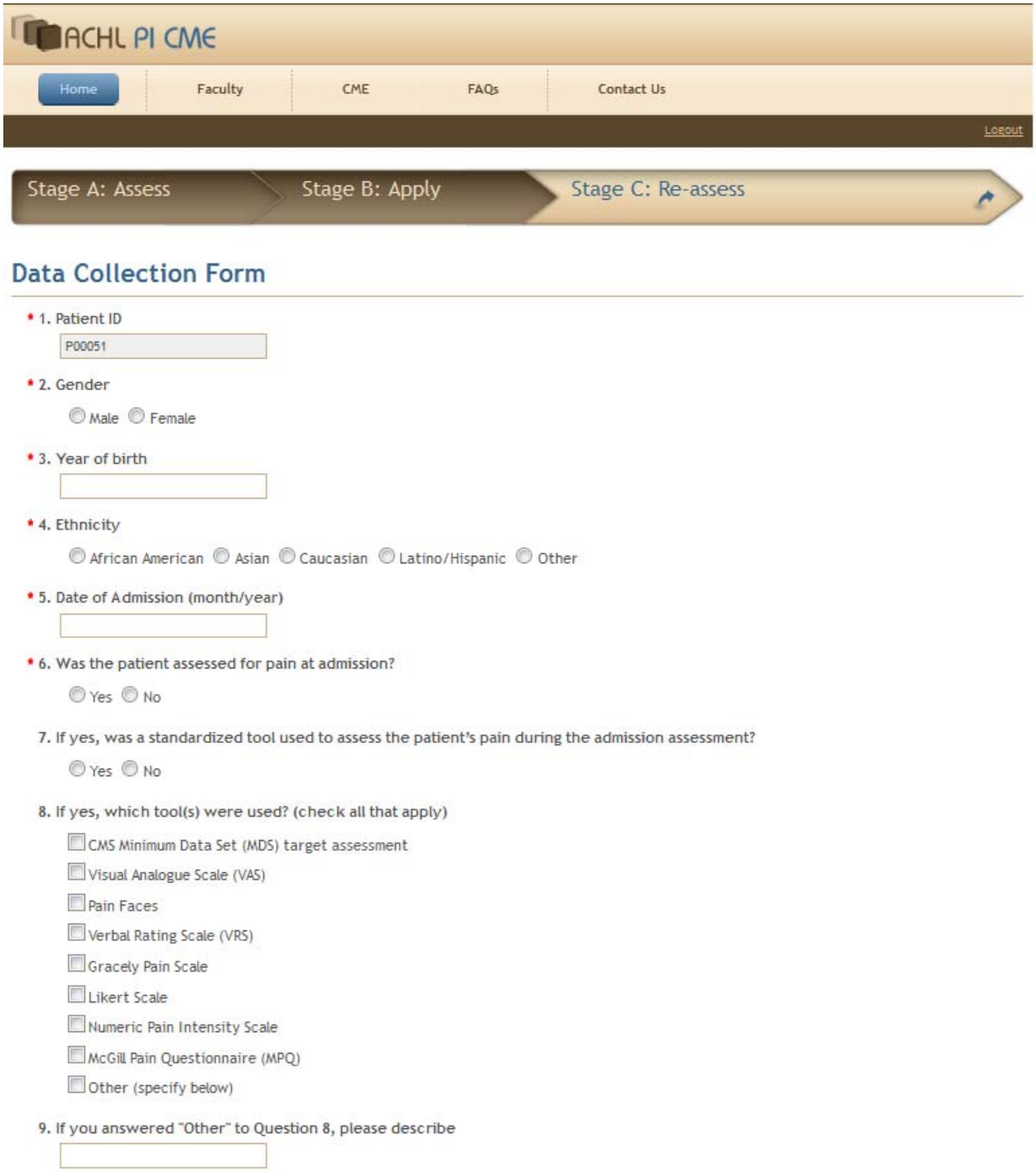
Data collection will focus on the following proposed quality measures (to be confirmed by faculty):

- *Preventative care and screening: percentage of patients aged 65 years and older who have documentation of receiving pneumococcal immunization during the two-year measurement period.* 2008 Sep. NQMC: 004460. PCPI.
- *Nursing facility chronic care: percent of eligible and willing long-stay residents who were assessed and given pneumococcal vaccination.* 2006 Oct. NQMC: 002751. CMMS. **(this measure to be applied to targeted housing/care facilities, eg, CCRCs, low income senior housing, and licensed ALFs)**
- *Immunization against influenza is offered to staff and licensed independent practitioners*. July 2007. JCAHO Standard IC.4.15.

Other independent variables will also be collected and cross tabulated against the above measures. Such variables may include, but aren't limited to: age, race/ethnicity, geographic

area (rural vs. urban), type of facility, size of facility, number of full time staff, socioeconomic factors, and percentage of residents on supplemental private insurance.

To facilitate data collection, a champion will be recruited at each facility to facilitate data collection and will be offered a modest honorarium for time expended. It is at the discretion of the facility as to whether the honorarium is retained by the individual champion or the facility itself. Screen shots of how the web portal collects data are provide below for illustrative purposes (separate disease state):



Stage B: Intervention via Live In-Service Meeting

For those facilities participating as part of the test cohort, data collected as part of Stage A will be analyzed and compared to national targets. This analysis will be provided to faculty who will construct a curriculum to deliver as part of a series of educational in-service meetings (N=20). Through dialectic lecture, analyses of cases, and problem-based learning methodologies, learners will attempt to identify strategies for improvement within their own setting. To do this, the national faculty leader will work with each facility to:

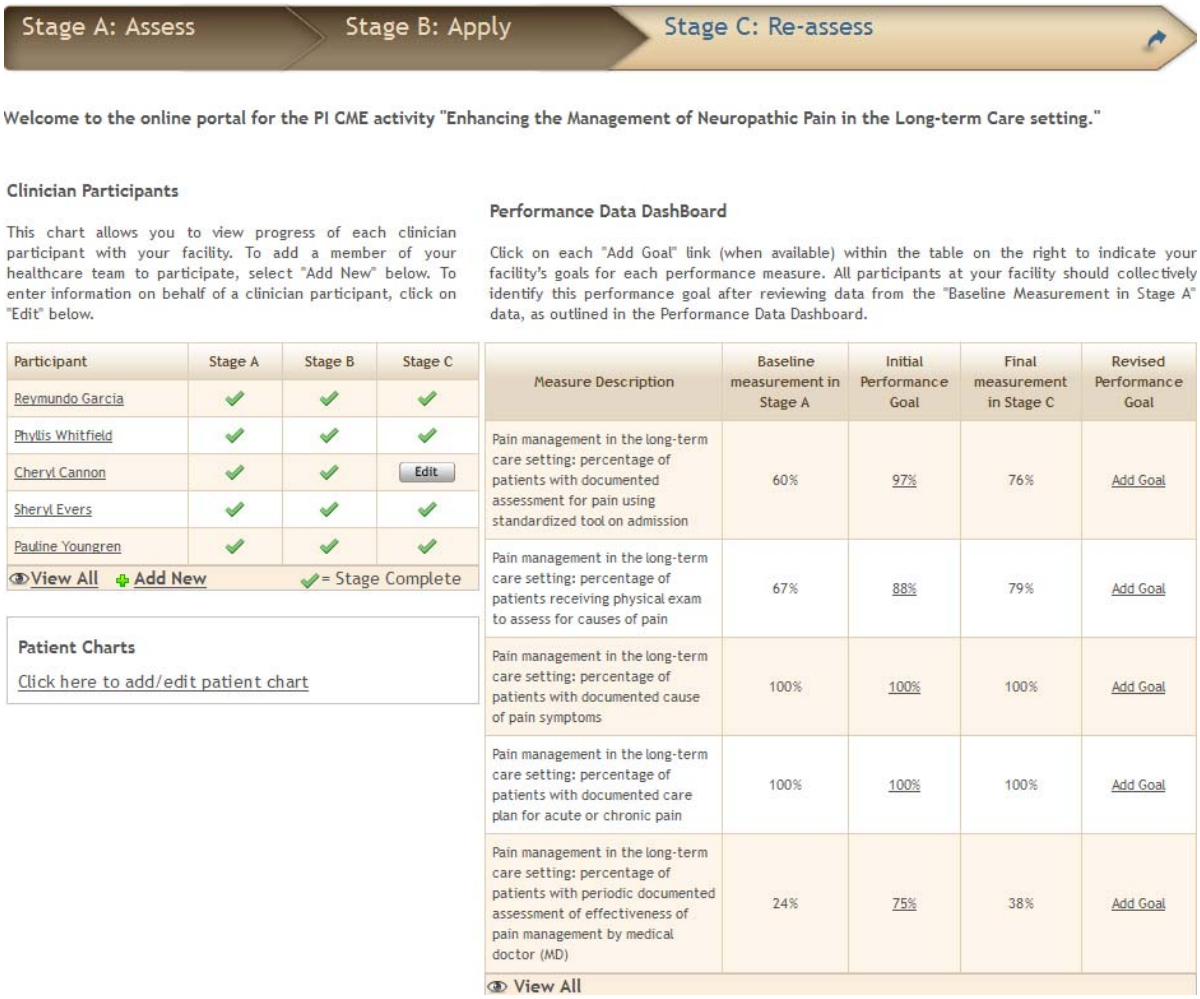
1) Assess cultural, procedural and financial barriers unique to that facility
2) Identify current areas in need of improvement and establish goals relative to the targeted national quality measures
3) Identify tools, procedures and resources for each facility to achieve goals
4) Create an action plan for implementing, inclusive of standing orders for vaccination, regular assessments of vaccination coverage levels, strategies to recognize barriers to adherence, reimbursement strategies

This strategic approach to the intervention ensures that the education delivered will 1) be responsive to the individual needs and demographics of each facility; 2) be considerate of a methodology that allows for data collection.

Stage C: Data Collection and Reassessment

Each facility within the test cohort (N=20) will be required to upload a new batch of patient data after 6 months of implementing new processes/protocols identified in Stage B. Those facilities within the control group (N=5) will be required to upload new patient data approximately 8-10 months after their initial data upload, as identified in Stage A.

A screen shot from the data collection portal of a different PI/QI activity is provided below for illustrative purposes:



Outcomes &Publication

The findings from the QI activity will be written as an action plan/organizational framework for spreading the successful practices learned. It includes an assessment of resources required to provide optimal immunization practices, persons/staffing needed, time parameters and ongoing evaluation strategies to measure success.

A sample action plan may look as follows:

Plan Component	Baseline Assessment	Strategies	Timeline	Assigned To
QI Team				
Goal(s)				
Data Analysis				
Tools				
Standing Orders				
Patient Info Form				
Patient Reminders				
Implementation				
Evaluation				

This paper will be submitted for publication in a peer-reviewed journal as well as disseminated by Leading Age Indiana amongst its state members and to other chapters nationwide.

Proposed Contribution & Design Rationale

A recent integrative review of the literature demonstrated that immunization rates increased consistently when health care systems supported organizational changes in clinical procedures and staffing. (Koch 2011) For this reason, a QI activity delivering education at the point of care is the optimal approach to drive change at the system level.

Focusing education and data collection at the state level allows for greater control of the educational design by isolation of variables that may influence outcomes such as geography, staffing mix, patient demographics and funding sources. Indiana is an ideal state given its ability to deliver representation in urban and rural settings, patient demographics crossing racial and socioeconomic profiles, and access to the elderly and their care providers through partnership with Leading Age Indiana.

c. Evaluation Design

The quality improvement platform to be used enables analysis at Moore's Levels 1 through 5. Further, each facility will assess and report on their respective performance against the identified quality measures. A summary of findings will be included on an aggregate (all facilities) and individual facility (blinded) basis. Indiana University, Leading Age Indiana and ACHL will assess and compare findings to identify any ongoing quality issues. Upon completion of analyses of outcomes data, a summary will be submitted for publication to a peer-reviewed journal.

Success relative to the program goals will be established if the vaccination rate for elderly residents and vaccine-qualifying workers within these housing/care facilities improves over baseline. Improvement will be measured relative to each facility's individual vaccination practices, pre (Stage A) and post (Stage C), the aggregated vaccination practices of all participating test-group facilities (N=20) versus the control group (N=5), and aggregated vaccination practices of all participating test-group facilities compared to national averages, and compared to quality targets (eg, 90%).

As outlined in the Intervention Design and Methods above, data will be drawn directly from each facility's patient/resident records. Data will be collected via an online portal and a data collection worksheet will be provided to champions to facilitate data collection while protecting patient/resident/employee privacy. Because some of these facilities may not employ a standard "patient chart" approach for tracking, the sponsors will work with faculty to determine the appropriate number of records to pull for Stage A and Stage C and how to stratify the selection processes.

In addition to the 20 participating test-group facilities for which a Stage B intervention will be executed, 5 additional facilities will be identified to serve as a control group. This population will still engage in Stage A and C, with Stage C data collection occurring after a specified period of time (estimated at 8-10 months following Stage A).

3. Detailed Workplan and Deliverables Schedule

The workplan for this initiative follows the Plan-Do-Study-Act (PDSA) model to quality improvement. Project management steps are organized around this QI approach, with clearly defined phases for planning, implementation and monitoring. These stages support successful project delivery and focus the activity on the use of evidence-based vaccination practices.

Each step of the proposed quality improvement activity is listed in detail in the table that follows.

Project Phase 1	Pre Planning
Key Deliverables	• Recruitment of faculty • Establishment/confirmation of goals and objectives • Determination on data methodologies with biostatistician • Creation of a web-based data portal • Development of communications plan and outreach strategies • Completion of CME/CE planning document

Activities		**2012**	**2013**				**2014**	**Lead Person**
		Q4	**Q1**	**Q2**	**Q3**	**Q4**		
1.1	Initial planning call with all joint sponsors	X						
1.2	Approval of faculty & COI review	X						
1.3	Generation and dissemination of faculty invitations	X						
1.4	Review and determination of goals, objectives, evaluation criteria	X						
1.5	Creation of data collection mechanisms (paper based worksheets)	X						
1.6	Oversee development of web-based data portal	X						
1.7	Creation of outreach letters	X						
1.8	Dissemination of outreach letters	X						
1.9	Facility recruitment – creation of waitlist (if necessary)	X						
1.10	Champion recruitment	X						
1.11	Planning document – CE applications	X						

Project Phase 2	Stage A							
Key Deliverables	• Champion training • Initial facility data submission • Stage A data compilation and analyses • Creation of intervention materials							
Activities		**2012**	**2013**				**2014**	**Lead Person**
		Q4	**Q1**	**Q2**	**Q3**	**Q4**		
2.1	Create training manual on expectations, data submission criteria, reporting	X						
2.2	Schedule and facilitate training calls with champions	X						
2.3	Create contact database for ongoing outreach, notifications and reminders	X						
2.4	Use individual patient/resident worksheets to organize initial data	X	X					
2.5	Submit Stage A data into online portal	X	X					
2.6	Compile and prepare analysis of Stage A data		X	X				
2.7	Review Stage A findings – prepare strategies for Stage B intervention		X	X				
2.8	Process honoraria payments to champions upon successful completion		X					

Project Phase 3	Stage B							
Key Deliverables	• 20 In-service educational meetings • Individual facility action plans and support materials • Implementation of changes within facilities							
Activities		**2012**	**2013**				**2014**	**Lead Person**
		Q4	**Q1**	**Q2**	**Q3**	**Q4**		
3.1	Schedule interventions/in-service meetings with 20 facilities in test cohort			X				
3.2	Prepare facilitation guide and slides on individualized program format to assist faculty			X				
3.3	Perform compliance reviews of all content			X				
3.4	Coordinate faculty travel			X	X			
3.5	Manage live meeting evaluations			X	X			
3.6	Manage live meeting feedback mechanisms (for action plan creation)			X	X			
3.7	Create action plans				X			
3.8	Create support materials for action plans (revised protocols, patient ed, etc)				X			
3.9	Implement changes within facility				X	X		

Project Phase 4	Stage C							
Key Deliverables	• Post intervention data submission • Stage C data compilation							
Activities		**2012**	**2013**				**2014**	**Lead Person**
		Q4	**Q1**	**Q2**	**Q3**	**Q4**		
4.1	Use individual patient/resident worksheets to organize post data				X	X		
4.2	Submit Stage C data into online portal				X	X		
4.3	Compile and prepare analysis of Stage C data					X	X	
4.4	Review Stage C findings – prepare data analyses						X	
4.5	Process final honoraria payments to champions						X	

Project Phase 5	Outcomes &Publication
Key Deliverables	• Creation of tool box/organizational framework on improved vaccination practices • Submission to peer-reviewed journal • Dissemination to Leading Age Indiana members and other state chapters

Activities		**2012**	**2013**				**2014**	**Lead Person**
		Q4	**Q1**	**Q2**	**Q3**	**Q4**		
5.1	Write outcomes manuscript/toolbox/organizational framework						X	
5.2	Publication submissions to journal(s)						X	
5.3	Disseminate publication to Leading Age Indiana constituents						X	
5.4	Provide final outcomes report to grantor						X	
5.5	Financial reconciliation						X	